

## AMENDMENTS

RECEIVED  
CENTRAL FAX CENTER

In the claims, please enter the follow amendments:

OCT 16 2006

1. (currently amended) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprises:

a conductor;  
a shaft surrounding at least a portion of the conductor;  
a non-conductive braid connected with the shaft; and  
an ultrasound transducer connected with the shaft and electrically connected with the conductor

wherein the ultrasound transducer is positioned in a tip portion of the shaft, the tip portion of the shaft being free of the non-conductive braid;

wherein the shaft is free of electrically conductive material.

2. (original) The catheter of Claim 1 wherein the non-conductive braid comprises a braid of mono-filament material.

3. (original) The catheter of Claim 1 wherein the non-conductive braid comprises mono-filament nylon material.

4. (original) The catheter of Claim 1 wherein the non-conductive braid comprises a material selected from the group consisting of: glass, plastic, nylon and combinations thereof.

5. (original) The catheter of Claim 1 wherein the non-conductive braid is embedded within the shaft.

6. (cancelled)

7. (original) The catheter of Claim 1 wherein the shaft comprises a tip portion fused to a body portion, the non-conductive braid connected with the body portion.

8. (original) The catheter of Claim 1 wherein the non-conductive braid comprises a configuration selected from the group consisting of: spiral, diamond weave and combinations thereof.

9. (original) The catheter of Claim 1 further comprising a dielectric film adjacent an emitting surface of the ultrasound transducer.

10-14. (canceled)

15. (previously presented) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprising:

a catheter shaft;  
an ultrasound transducer connected with the catheter shaft;  
a lens adjacent the ultrasound transducer, the lens having a focus; and  
a dielectric solid film adjacent the ultrasound transducer, the dielectric solid film comprising a polyester film;

wherein:

the catheter shaft comprises a tip portion;  
the ultrasound transducer connects with the tip portion; and  
the dielectric film surrounds a circumference of the ultrasound transducer, the circumference being over an emitting surface, a back and at least two sides of the ultrasound transducer.

16. (previously presented) The catheter of Claim 15 wherein the dielectric film is positioned between the lens or window and the ultrasound transducer.

17. (original) The catheter of Claim 15 wherein the dielectric film comprises a tape material.

18. (canceled)

19. (previously presented) The catheter of Claim 15 wherein the polyester film comprises Mylar.

20. (original) The catheter of Claim 15 wherein the dielectric film comprises a film having a thickness less than 7 microns.

21. (cancelled)
22. (original) The catheter of Claim 15 wherein the dielectric film is positioned adjacent an emitting surface of the ultrasound transducer.
23. (original) The catheter of Claim 15 further comprising a non-conductive braid connected with the shaft.
24. (previously presented) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprising:
  - a shaft;
  - an ultrasound transducer connected within the shaft; and
  - a dielectric solid film positioned between a portion of the shaft and the ultrasound transducer, wherein the dielectric surrounds at least a portion of a circumference and one end of the ultrasound transducer, the dielectric solid film having a thickness less than 7 microns.
25. (original) The catheter of Claim 24 further comprising a lens adjacent the ultrasound transducer, wherein the dielectric film is positioned between the lens and the ultrasound transducer.
26. (original) The catheter of Claim 24 wherein the dielectric film comprises a polyester film.
27. (cancelled)
28. (original) The catheter of Claim 24 further comprising a non-conductive braid connected with the shaft.
29. (currently amended) A medical catheter for insertion into a body, the catheter comprising:
  - a shaft;
  - an electrical conductor connected with a transducer within the shaft; and

a non-conductive braid connected with the shaft to transmit torque to the shaft wherein the ultrasound transducer is positioned in a tip portion of the shaft, the tip portion of the shaft being free of the non-conductive braid;

wherein the shaft is free of electrically conductive material.

30. (original) The catheter of Claim 29 wherein the non-conductive braid comprises a braid of mono-filament material.

31. (original) The catheter of Claim 29 wherein the non-conductive braid comprises mono-filament liquid crystal polymer material.

32. (original) The catheter of Claim 29 wherein the non-conductive braid comprises a material selected from the group consisting of: glass, plastic, nylon and combinations thereof.

33. (original) The catheter of Claim 29 wherein the non-conductive braid is embedded within the shaft.

34. (previously presented) The catheter of Claim 29 further comprising: an ultrasound transducer electrically connected to the conductor.

35. (original) The catheter of Claim 29 further comprising a control within the shaft.

36. (original) The catheter of Claim 1 wherein the non-conductive braid comprises liquid crystal polymer material.

37-43. (cancelled)

44. (previously presented) The catheter of Claim 15 wherein the dielectric surrounds the circumference and one end of the ultrasound transducer.

45-47. (cancelled)

48. (previously presented) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprising:

- a catheter shaft;
- an ultrasound transducer connected with the catheter shaft;
- a dielectric film positioned between a portion of the catheter shaft and the ultrasound transducer; and
- a lens adjacent the ultrasound transducer, wherein the dielectric film is positioned between the lens and the ultrasound transducer;
- wherein the dielectric film surrounds a circumference of the ultrasound transducer.

49. (previously presented) The catheter of Claim 48 further comprising a flexible circuit connected with the ultrasound transducer, the dielectric film being separate from the flexible circuit, the flexible circuit being between the transducer and the dielectric film.

50. (previously presented) The catheter of Claim 16 further comprising a flexible circuit connected with the ultrasound transducer, the dielectric film being separate from the flexible circuit, the flexible circuit being between the transducer and the dielectric film.